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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,613	02/20/2004	Masao Shoji	FPO-CE-24016 (108470-1)	7218
7590	07/27/2006		EXAMINER DUNWIDDIE, MEGHAN K	
Olson & Hierl, Ltd. 36th Floor 20 N. Wacker Drive Chicago, IL 60606			ART UNIT 2875	PAPER NUMBER

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

This Office Action is a Final Rejection in response to the amendment received on May 3, 2006 by **Shoji**.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on June 22, 2006 is in compliance with the provisions of 37 CFR 1.97, and accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4, 7, and 8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Petterson** (US 4530040) in view of **Natsume** (US 2002/0030998) and **Maglica** (US 5749645).

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5. Regarding Claim 1, **Petterson** shows an illumination apparatus projecting light forward, comprising:

- A light source [Figure 6: (18)];
- Forward projecting means positioned in front of said light source for receiving light from said light source to project the light forward [See column 4 lines 5-8];
- A reflecting mirror enclosing said light source and said forward projecting means for directing and reflecting forward the light from said light source [Figure 6: (12)].

6. Regarding Claim 2, **Petterson** shows:

- Said reflecting mirror is a parabolic mirror, and said light source is positioned at a focus of the parabolic mirror [See column 1 lines 51-52 in reference to Figure 6: (12, 18, and 16)].

7. Regarding Claim 3, **Petterson** shows:

- Said forward projecting means [See column 4 lines 5-8] is a Fresnel lens [See column 3 lines 52 in reference to Figure 6: (14)] having a stepped surface arranged on a plane [See column 5 lines 15-18] on opposite side of said light source [Figure 6: (18)], the illumination apparatus [Figure 6: (10)] further comprising transparent air-blocking means [Figure 6: (40)] provided in front of said Fresnel lens to prevent said Fresnel lens from being exposed to air.

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8. Regarding Claim 4, **Petterson** shows:

- Said forward projecting means [See column 4 lines 5-8] is small-diameter reflecting mirror [Figure 6: (22)] having an aperture smaller than that of said reflecting mirror [Figure 6: (12)].

9. **Petterson** does not show:

- A light source-fixing member fixing said light source at a rear end thereof, enclosing said reflecting mirror, and having an opening at the front end thereof;
- A transparent protective cover joined to a front end of said forward projecting means to cover said opening of said light source-fixing member;
- Distance varying means including a screw mechanism connecting said protective cover and said light source-fixing member that can vary a distance between said forward projecting means and said light source.

10. **Natsume** teaches:

- A light source-fixing member fixing said light source at a rear end thereof [Figure 16: (14 and 22)], enclosing said reflecting mirror [Figure 16: (24)], and having an opening at the front end thereof [See Figure 16];
- A transparent protective cover joined to a front end of said forward projecting means to cover said opening of said light source-fixing member [Figure 16: (16)].

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11. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the illumination apparatus of **Petterson** with a light source-fixing member and a transparent protective cover as taught by **Natsume** for the purpose and advantage of enclosing and protecting the reflecting mirror and light source of the illumination apparatus.

12. **Petterson** and **Natsume** do not show:

- Distance varying means including a screw mechanism connecting said protective cover and said light source-fixing member that can vary a distance between said forward projecting means and said light source.

13. However, **Maglica** teaches:

- Distance varying means including a screw mechanism connecting said protective cover and said light source-fixing member that can vary a distance between said forward projecting means and said light source [See unlabeled screw mechanism in Figure 2].

14. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the illumination apparatus of **Petterson** and **Natsume** with distance varying means as taught by **Maglica** for the purpose and advantage of controlling the light distribution pattern created by the light source within the illumination apparatus.

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15. Regarding Claim 7, **Petterson** shows the claimed invention as cited above, but does not specifically teach the light source is a LED (Light Emitting Diode).

16. **Natsume** teaches:

- Said light source is a LED (Light Emitting Diode) [See paragraph [0096] lines 3-4 in reference to Figure 16: (22)].

17. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the illumination apparatus of **Petterson** with a LED (Light Emitting Diode) as taught by **Natsume** for the purpose and advantage of providing an alternate means of a light source and also a long lasting and reliable light source.

18. Regarding Claim 8, **Petterson** and **Natsume** show the claimed invention as cited above, but do not specifically teach the screw mechanism comprises complementary threads at the front end of the light source-fixing member and on the protective cover.

19. **Maglica** teaches:

- Said screw mechanism comprises complementary threads at the front end of the light source-fixing member and on the protective cover [See unlabeled screw mechanism in Figure 2].

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20. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the illumination apparatus of **Petterson** with a screw mechanism comprising complimentary threads at the front end of the light source-fixing member and on the protective cover as taught by **Maglica** for the purpose and advantage of securing the protective cover to the light source-fixing member of the illumination apparatus.

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is


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(571)272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MKD


Stephen Husar
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